

#### Thesis Title

sub-title

**AUTHOR NAME** 

Doctoral Thesis Stockholm, Sweden, 2020

KTH Royal Institute of Technology
School of Electrical Engineering and Computer Science
Division of Fusion Plasma Physics
TRITA-EECS-AVL-2020:4
SE-10044 Stockholm
ISBN 100-Sweden

Akademisk avhandling som med tillstånd av Kungl Tekniska högskolan framlägges till offentlig granskning för avläggande av Teknologie doktorexamen i elektroteknik fredagen den 18 januari 2020 klockan 14.00 i Sal F3, Lindstedtsvägen 26, Kungliga Tekniska Högskolan, Stockholm.

© Author name, date

Tryck: Universitetsservice US AB

#### Abstract

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.

Keywords: Lorem, Ipsum, Dolor, Sit, Amet

#### Sammanfattning

## List of Papers

I Title of paper
First author, Second author
Journal (year)

Other contributions by the author not included in the thesis.

II Title of paper
First author, Second author
Journal (year)

## Acknowledgement

# Acronyms

List of commonly used acronyms:

**AE** Acronym examples

## Contents

Li	st of Papers	iii
A	cknowledgement	v
A	cronyms	vii
C	ontents	1
1	Energy needs - an introduction  1.1 Section	<b>3</b>
2	Chapter 2	5
3	Summary of the included papers 3.1 Paper I	<b>7</b> 7
4	Conclusions 4.1 Conclusions	<b>9</b>
5	Personal reflections	11

Table 1.1: List of experimental tokamaks worldwide. Note: ITER is currently under construction and the first plasma is predicted for 2025-2028.

Name	Location	B-field	Major/minor radius
JET	England	4.0 T	3.0 m / 1.3 m
ITER	France	$5.3 \mathrm{\ T}$	$6.2~\mathrm{m}$ / $2.0~\mathrm{m}$
$\overline{AUG}$	Germany	3.1 T	$1.7~\mathrm{m}~/~0.7~\mathrm{m}$
WEST	France	$3.7 \mathrm{~T}$	$2.5~\mathrm{m}~/~0.5~\mathrm{m}$
TCV	Switzerland	$1.5 \mathrm{\ T}$	$0.9 \; \mathrm{m} \; / \; 0.3 \; \mathrm{m}$
DIII-D	USA	$2.2 \mathrm{\ T}$	$1.7 \; \mathrm{m} \; / \; 0.7 \; \mathrm{m}$
TFTR	USA	$6.0~\mathrm{T}$	$2.5~\mathrm{m}~/~0.9~\mathrm{m}$
JT-60	Japan	$4.0 \mathrm{\ T}$	3.4  m / 1.0  m
K-STAR	South Korea	$3.5 \mathrm{~T}$	$1.8 \; \mathrm{m} \; / \; 0.5 \; \mathrm{m}$
EAST	China	$3.5 \mathrm{\ T}$	$1.9~\mathrm{m}$ / $0.5~\mathrm{m}$

## Energy needs - an introduction

Here is an example for referencing figure 1.1. Example of citing [?] and [?].

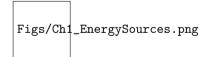


Figure 1.1: The world's energy consumption by fuel in 2017.

#### 1.1 Section

Example of a table

## Chapter 2

## Summary of the included papers

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.

#### 3.1 Paper I - ...

### Conclusions

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.

#### 4.1 Conclusions

#### Personal reflections

## References

- [1] BP Statistical Review of World Energy, ed. 68th, accessed 2019-09-26. BP, 2019.
- [2] F. Chen, Introduction to Plasma Physics and Controlled Fusion. Springer, Switzerland, third edition ed., 2016.